SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service Washington, DC





U.S. Department of Transportation

Federal Aviation Administration

NE-04-53 February 17, 2004

www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises you, owners and operators of **Bombardier Inc. model CL-600-2B19 Regional Jet Series 100 and 440 airplanes**, that Transport Canada Civil Aviation (TCCA) has recently released Service Difficulty Alert (SDA) AL-2004-01, dated January 27, 2004. TCCA has determined that **mandatory airworthiness action isn't required at this time**. The SDA recommends an inspection for damage to the aft pressure bulkhead at FS 621, in the area of the stainless steel angle and the cargo door track liner.

Background

During C-Check of several CL-600-2B19 Regional Jet Series 100 and 440 airplanes, there have been 33 cases of inadvertent damage to the pressure bulkhead reported. It has been determined that this damage occurred while carrying out Repair Engineering Order (REO) 601R-25-53-005, dated October 10, 1997, and during the replacement of the bulkhead liner around the cargo door track.

The bulkhead is located at FS 621 and is considered a Principal Structural Element. The REO allows for the installation of a new stainless steel angle at FS 621, WL 73. During the installation of the new angle, the drill bit was allowed to contact and penetrate the bulkhead behind the supporting structure in some cases. Additional cases resulted from the in-service replacement of the bulkhead liner around the cargo door track. During the replacement of these liners, maintenance personnel and inspectors have found many aircraft with additional holes drilled adjacent to the original and intended pick up points.

Bombardier Aerospace issued new REOs, on a case-by-case basis, for repair of the cases reported to date. Such discrepant condition of the aft pressure bulkhead at FS 621 is due to poor maintenance practices. None of the reported cases revealed the existence of cracks. However, the inadvertent damage to the bulkhead, if left unrepaired, could impact the damage tolerance capability of the structure.

Recommendations

The FAA highly recommends that maintenance personnel follow the instructions provided in the REO and the aircraft Structural Repair Manual when they incorporate REO 601R-25-53-005. In addition, we strongly recommend that the operators carry out, at their earliest convenience, a detailed visual inspection for damage (such as drill bit marks, mis-drilled holes, additional holes, cracking) to the aft pressure bulkhead, in the area of the stainless steel angle and the cargo door track liner. Removal of the liner and the angle may be necessary to adequately carry out the detailed inspection.

Such inadvertent damage incurred during these repairs for affected aircraft, may impact the damage tolerance analysis of the bulkhead. As such, the threshold and repeat inspections could be significantly reduced. You should report any defects or further occurrences to the New York Aircraft Certification Office (NYACO) and Transport Canada, Continuing Airworthiness, Ottawa.

For Further Information, Contact

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For Transport Canada Alert Information, Contact

TCCA, Steve Dudka, Continuing Airworthiness, Ottawa; phone: (613) 952-4361; fax: (613) 996-9178; email: dudkas@tc.gc.ca

For In-Service Information, Contact

Bombardier Aerospace Regional Field Service Representative or the Technical Help Desk in Montreal at (514) 855-8500 or fax (514) 855-8501.